

Causes of bleeding in early pregnancy (1st trimester)

1- Abortion 2-Vesicular mole 3-Ectopic pregnancy

Definition: Blastocyst isn't implanted in the normal uterine cavity

Incidence: 0.5 - 2 %

Sites of Ectopic:

1- Tube (most common) 90% ► -Interstitial 2%, Isthmus 5%, Ampulla 78%, Fimbriae 12%
2- Ovary 3-Cervix 4-Rudimentary horn 5-Peritoneal cavity

Epidemiology: Leading cause of maternal death in early pregnancy (9%)

** (50 times more than normal labor & 10 times more than induced abortion)

- ↓ Chance that pregnancy will occur again to 60 – 80 % only

Etiology:

1-Infections (Salpingitis, STDs) due to ciliary damage, peritubal adhesions, ↓ muscle contractions

2-Congenital abnormalities of the fallopian tubes (e.g. Long tube)

3-Tumor (intraligamentary or ovarian) → Pressure on the tube

4-↓ Motility → IUD with progestogen, Progesterone only CCP

** IUD decrease only intrauterine pregnancy so appears like it is ↑ extrauterine pregnancy

Symptoms:

1-Pain: due to tube extension, dull aching pain (If rupture → intraperitoneal bleeding → stabbing pain)

2-Bleeding: as the decidua inside the uterus detaches due to falling levels of progesterone

3-Tenderness with palpating of the cervix (Chandelier sign) (Yamning sign)

Outcome of pregnancy: (In tubes)

* May be Undisturbed in 1st 8 weeks

1-Mole: bleeding around pregnancy then fibrosis → death of the embryo

2-Abortion: usually through the fimbriae to the abdomen

3-Rupture: usually at the anti-mesenteric side (*then pregnancy may be implanted in the mesentery & the broad ligament, and may even reaches full term),

* Rupture → Intraperitoneal hemorrhage → Lt Shoulder pain + pallor & fainting

4-Full term pregnancy

Diagnosis:

1) Early: Serum β -hCG → 2 – 8 ml IU (doubling doesn't occur every 2 days)

2) U/S: Absent sac intrauterine with vaginal sonography (32 days) + β -hCG > 2000 ml IU or
Absent with abdominal sonography (39 days) + β -hCG > 6000 ml IU

3) Laparoscopy (diagnostic & therapeutic)

D.D.:

Same symptoms → 1) Appendicitis 2) Salpingitis (↑ WBCs & Temperature – Negative pregnancy test)

3) Small twisted ovarian cyst (Negative pregnancy test)

Treatment:

A) **Medical:** (kill trophoblast with methotrexate 30 mg/m² surface area)

Indications: Intact (undisturbed) pregnancy + Size < 3 cm + β -hCG level < 10000 mIU/ml L

**Follow up with β -hCG level till it is < 16 mIU

B) **Laparotomy:**

Indications: 1-Tubal rupture 2-Bad general condition (bleeding, low BP, ...)

C) **Laparoscopy:** In stable cases

*Conservative surgery (In intact): 1- Milking 2-Linear Salpingoscopy 3- Partial Salpingectomy

Rare Types:

1) **In Ovaries:** -Intact tube -Ovarian ligament between uterus and pregnancy -Ovarian tissue in analysis

2) **In Cervix:** TTT is Hysterectomy to control bleeding

3) **Advanced abdominal pregnancy:** due to rupture of anti-mesenteric border of the tube

